Quillayute River watershed

The Quillayute River begins at the confluence of the Soleduck and Bogachiel Rivers and travels only 6.5 miles before it outflows into the ocean. The remaining 6.9 square-miles of contributing area in the Quillayute River watershed below the Soleduck and Bogachiel confluence is entirely below 300 feet above sea level. As a result, this entire area is characterized entirely as coastal lowland subwatershed and was considered ineffective to flow due to a lack of streamflow measurements that proved otherwise. Precipitation ranges from 74 inches annually near the outlet and increases to the east up to 87 inches annually at the Soleduck and Bogachiel River confluence. Administration of this area is dominated by private owners, as summarized in Table 54 and illustrated in Figure 27.

Table 54. Land administration within the Quillayute River watershed.

| | | Percent of |
|-------------------------------|----------------|------------|
| Land Administration | Area (sq. mi.) | Total Area |
| Olympic National Park | 1.9 | 27.1 |
| State of Washington | 0.52 | 7.6 |
| Quillayute Indian Reservation | 0.61 | 8.8 |
| Privately owned | 3.9 | 56.6 |
| Total Area | 6.9 | 100 |

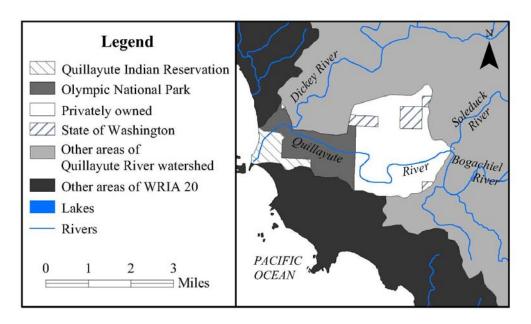


Figure 27. Land administration within the Quillayute River watershed.

Quillayute River below Soleduck and Bogachiel River confluence -

The Quillayute River begins at the Soleduck River and Bogachiel River confluence. Therefore streamflow at the top of the Quillayute River was estimated by merely adding together the outflow of these two rivers. The resultant streamflow was evaluated to demonstrate the variation in streamflow as illustrated below. Similar to the tributary watersheds, the months exhibiting the greatest variation are between November and January, and baseflow conditions occur in the late summer months of August and September.

Quillayute River below Soleduck and Bogachiel Confluence 1962 - 99 % time flow less than or equal to

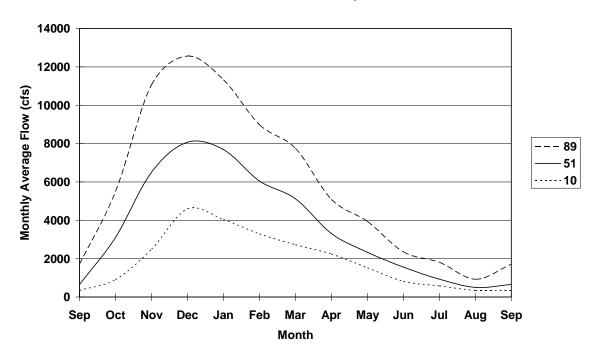


Table 55. The percent of time that average monthly streamflow (cfs) at the top of the Quillayute River is less than or equal to the indicated value.

| Percent | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------|------|-------|-------|-------|------|------|------|------|------|------|-----|------|
| 89 | 5496 | 11062 | 12565 | 11335 | 8986 | 7756 | 5097 | 3937 | 2356 | 1813 | 926 | 1713 |
| 51 | 3108 | 6510 | 8073 | 7689 | 6049 | 5124 | 3314 | 2333 | 1559 | 932 | 502 | 656 |
| 10 | 904 | 2490 | 4593 | 4045 | 3292 | 2730 | 2246 | 1522 | 814 | 582 | 348 | 344 |

Quillayute River below Dickey River or at the Outlet -

As mentioned previously, the lowest areas of the Quillayute River watershed were not considered to contribute significantly to streamflow in the Quillayute River. For this reason, streamflow in the Quillayute River watershed below Dickey River was estimated by adding the Dickey River outflow to the estimates generated for the Quillayute River below the Soleduck and Bogachiel Rivers confluence. Again, the Dickey River outflows into the Quillayute River watershed only 1.25 miles upstream from the ocean outlet, thus streamflow at this point is considered equal to that at the outlet. Additionally, it may be difficult to accurately measure streamflow at this location, since it may be affected by tidal fluctuations in the Pacific Ocean. Nonetheless, the variation in streamflow expected at this location is illustrated below. The months exhibiting the greatest variation are between November and January, and baseflow conditions occur in the late summer months of August and September.

Quillayute River below Dickey River 1962 - 99 % time flow less than or equal to

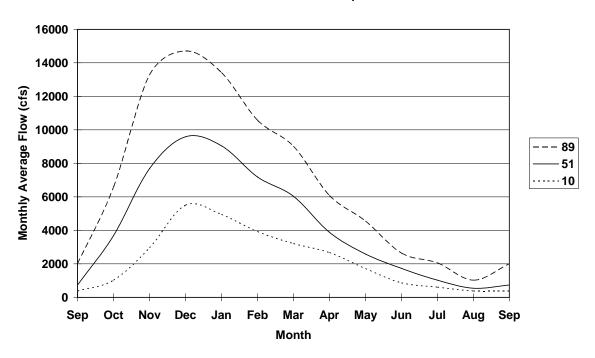


Table 56. The percent of time that average monthly streamflow (cfs) at the Quillayute River below Dickey River is less than or equal to the indicated value.

| Percent | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 89 | 6564 | 13270 | 14707 | 13423 | 10576 | 9018 | 6087 | 4556 | 2642 | 2057 | 1023 | 2006 |
| 51 | 3676 | 7686 | 9589 | 9052 | 7188 | 6033 | 3887 | 2590 | 1731 | 1023 | 540 | 735 |
| 10 | 1018 | 2952 | 5503 | 4946 | 3920 | 3211 | 2672 | 1709 | 865 | 608 | 376 | 378 |